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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/591,632	06/09/2000	Susan Lindquist	27373/34978A	2820	
75	90 03/13/2006		EXAM	INER	
Marshall O'To	ole Gerstein		TURNER, S	HARON L	
Murray & Borus				PAPER NUMBER	
6300 Sears Tow	er		ART UNIT		
233 South Wacl	ker Drive		1649		
Chicago, IL 6	0606-6402		DATE MAILED: 03/13/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION		ATTORNEY DOCKET NO.
				EXAMINER
			ART UNIT	PAPER
				2-29-06

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Please see attached Sequence Error Report and Notice to Comply

COUNT SHEET FOR SEQUENCE CASES

Serial No. $\frac{69}{59}$	1,632 AE
Mark only one spac	Date of Count
	(CRFN) (CRF is unreadable; use CRF Diskette Problem Report)
	(CRFD) (CRF does not comply; use Notice to Comply)
	(CRFR) (CRF required but none submitted; use Notice to Comply)
	(bona fide) (second or subsequent letter to applicant reporting bona fide attempt to comply; use Notice to Comply and send copy of RSL)
	(non bona fide) (second or subsequent letter to applicant reporting non-bona fide attempt to comply; use Notice to Comply and send copy of RSL)
Examiner Sharor	1 (49 4647 1 L. Turner, Ph.D. GAU: <u>1645</u>



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER						
ART UNIT	PAPER NUMBER					

Please find below a communication from the EXAMINER in charge of this application

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. Applicant must comply with the requirements of the sequence rules (37 CFR 1.821 - 1.825) before the application can be examined under 35 U.S.C. §§ 131 and 132.

Applicant is given ONE MONTH from the mailing date of this communication within which to comply with the sequence rules, 37 CFR 1.821 - 1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). Direct the reply to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the reply.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Turner whose telephone number is (703) 308-0056. If the examiner cannot be reached, inquiries can be directed to Supervisory Patent Examiner Gary Whose telephone number is (703) 308-4623. The fax number for the organization where this application or proceeding is assigned is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

SPE is Janel andres 591-272-0867

SHARON TURNER, PH.D. PRIMARY EXAMINER

571-272-0894 2-29-06

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

g reason(s):
1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
7. Other: <u>Su attached urror report</u> .
Applicant Must Provide:
An initial or <u>substitute</u> computer readable form (CRF) copy of the "Sequence Listing".
An initial or <u>substitute</u> paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).
For questions regarding compliance to these requirements, please contact:
For Rules Interpretation, call (703) 308-4216 For CRF Submission Help, call (703) 308-4212 Patentin Software Program Support Technical Assistance
PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY
PLEASE RETURN A COFF OF THIS NOTICE WITH 1001. 12.

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/59/, 632 C
Source: 1Fw/6
Date Processed by STIC: 2/7/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (httm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/591, 632C
ATTN: NEW RULES CASES:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3 Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6Patentln 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <10> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFW16

DATE: 02/07/2006 RAW SEQUENCE LISTING TIME: 09:01:23 PATENT APPLICATION: US/09/591,632C Input Set : A:\34978a.txt Output Set: N:\CRF4\02072006\I591632C.raw 3 <110> APPLICANT: Lindquist, et al. 5 <120> TITLE OF INVENTION: RECOMBINANT PRION-LIKE GENES AND PROTEINS AND MATERIALS AND 20 (see iden 2 on See iden 2 on Selete - funnay there are funnay tot prior fleet) date, they, are current data, METHODS COMPRISING SAME 8 <130> FILE REFERENCE: 30554/34978A C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/591,632C C--> 10 <141> CURRENT FILING DATE: 2000-06-09-10 <150> PRIOR APPLICATION NUMBER: US 09/591,632 14 <151> PRIOR FILING DATE: 2000-06-09 13 <150> PRIOR APPLICATION NUMBER: US 60/138,833 14 <151> PRIOR FILING DATE: 1999-06-09 16 <160> NUMBER OF SEQ ID NOS: 70 18 <170> SOFTWARE: PatentIn version 3.3 Does Not Comply ERRORED SEQUENCES Corrected Diskette Needed 429 <210> SEQ ID NO: 3 430 <211> LENGTH: 1427 /426 (ρ .3) 431 <212> TYPE: DNA pp 1,3,5-6,7 432 <213> ORGANISM: Saccharomyces cerevisiae 434 <220> FEATURE: 435 <221> NAME/KEY: CDS 436 <222> LOCATION: (182)..(1246) 438 <400> SEQUENCE: 3 439 ctcgaggttg aaaagaatag caaaaatctt tccttttcaa acagctcatt tggaattgtt 60 441 tataqcactq aattqaatcq aagaggaata aagatccccc gtacgaactt ctttattttt 120 443 aqtttttcat tttttgttat tagtcatatt gttttaagct gcaaattaag ttgtacacca 180 445 a atg atg aat aac aac ggc aac caa gtg tcg aat ctc tcc aat gcg ctc 229 446 Met Met Asn Asn Asn Gly Asn Gln Val Ser Asn Leu Ser Asn Ala Leu 10 449 cgt caa gta aac ata gga aac agg aac agt aat aca acc acc gat caa 277 450 Arg Gln Val Asn Ile Gly Asn Arg Asn Ser Asn Thr Thr Thr Asp Gln 325 453 agt aat ata aat ttt gaa ttt tca aca ggt gta aat aat aat aat aat 454 Ser Asn Ile Asn Phe Glu Phe Ser Thr Gly Val Asn Asn Asn Asn Asn 35 40 373 457 aac aat agc agt agt aat aac aat aat gtt caa aac aat aac agc ggc 458 Asn Asn Ser Ser Ser Asn Asn Asn Val Gln Asn Asn Asn Ser Gly 55 461 cgc aat ggt agc caa aat aat gat aac gag aat aat atc aag aat acc 421 462 Arg Asn Gly Ser Gln Asn Asn Asp Asn Glu Asn Asn Ile Lys Asn Thr 70 75 463 65 469 465 tta qaa caa cat cga caa caa caa cag gca ttt tcg gat atg agt cac

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\1591632C.raw

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467	Dea	GIU	GIII	1113	85	GIII	GIII	GIII	0111	90		DCI	пор		95		
	qtq	qaq	tat	tcc	aga	att	aca	aaa	ttt	ttt	caa	gaa	caa	cca	ctg	gag	517
						Ile											
471			-	100	_				105					110			
						tct											565
474	Gly	Tyr	Thr	Leu	Phe	Ser	His	Arg	Ser	Ala	Pro	Asn	Gly	Phe	Lys	Val	
475			115					120					125				
						gaa											613
478	Ala	Ile	Val	Leu	Ser	Glu	Leu	Gly	Phe	His	Tyr		Thr	Ile	Phe	Leu	
479		130					135					140					
						gaa											661
482	Asp	Phe	Asn	Leu	Gly	Glu	His	Arg	Ala	Pro		Phe	Val	Ser	Val		
	145					150					155					160	
						cca											709
	Pro	Asn	Ala	Arg		Pro	Ala	Leu	Ile		His	GIA	Met	Asp		Leu	
487					165					170					175		250
						999											757
	ser	11e	Trp		ser	Gly	Ата	11e		Leu	HIS	Leu	vai		гÀг	TYL	
491				180					185	.	.			190			805
						aat											803
	Tyr	гàг		Thr	GIY	Asn	PIO	200	Leu	пр	261	Asp	205	пеп	MIA	ASP	
495		+ 42	195	25.0	225	gca	+~~		++0	++0	423	200		aaa	cat	aca	853
						Ala		_				_		-			033
499	GIII	210	GIII	116	A511	AIG	215	Deu	·	rne	GIII	220	JCI	O.J		*****	
	cca		att	gga	caa	gct		cat	ttc	аσа	tac		cat	tca	caa	aag	901
						Ala											
	225	•••				230				5	235					240	
		qca	agt	act	qta	gaa	aqa	tat	acq	gat	qaq	qtt	aqa	aga	gtt	tac	949
						Glu											
507					245		_	-		250			_	_	255	_	
509	ggt	gta	gtg	gag	atg	gcc	ttg	gct	gaa	cgt	aga	gaa	gcg	ctg	gtg	atg	997
						Ala											
511				260					265					270			
						aat											1045
514	Glu	Leu	Asp	Thr	Glu	Asn	Ala	Ala	Ala	Tyr	Ser	Ala	Gly	Thr	Thr	Pro	
515			275					280					285				
						ttc											1093
	Met	Ser	Gln	Ser	Arg	Phe		Asp	Tyr	Pro	Val		Leu	Val	Gly	Asp	
519		290					295					300				_	
						gat											1141
	_	Leu	Thr	Ile	Ala	Asp	Leu	Ala	Phe	Val		Trp	Asn	Asn	val		
	305					310					315					320	1100
						aat											1189
	Asp	Arg	Пе	Gly		Asn	тте	гàг	пе		rne	Pro	GIU	vaı		гÀ2	
527	•				325	_ 4				330					335		1000
						atg											1237
530	Trp	Inr	гуз	HIS	met	Met	arg	Arg	Pro	АТА	vaı	тте	rys	AIA	ьeu	Arg	

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\I591632C.raw

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	531		340	_	-			1286	
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		Gly Gly						1246	
		agaaggttat a						1346	
		caaaaatgtc a		taatagttt 1	tgaaatttct	gttgcttcta	tttattettt	1406	121
B>		gttaccccaa (–					(1427)/4	26
		<210> SEQ'II							
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		<212> TYPE:							
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		<220> FEATU							
		<223> OTHER		V: CUP1 pro	noter				
	732	<400> SEQUE	NCE: 11						
	733	ccattaccga (catttgggcg c	ctatacgtgc a	atatgttcat	gtatgtatct	gtatttaaaa	_. 60	
	735	cacttttgta 1	tatttttcc t	catatatgt g	gtataggttt	atacggatga	tttaattatt	120	
	737	acttcaccac d	cctttatttc a	aggctgatat o	cttagccttg	ttactagtta	gaaaaagaca	180	
	739	tttttgctgt (cagtcactgt c	caagagattc 1	tttgctggc	atttcttcta	gaagcaaaaa	240	
	741	gagcgatgcg 1	cetttteege t	gaaccgttc (cagcaaaaaa	gactaccaac	gcaatatgga	3,00	
	743	ttgtcagaat o	catataaaag a	agaagcaaa t	taactccttg	tcttgtatca	attgcattat	360	
	745	atatcttctt 9	gttagtgcaa t	atcatatag a	aagtcatcga	aatagatatt	aagaaaaaca	420	
E>	747	aactgtacaa	tcaatcaatc a	atca				445	
•	3712	2 <210> SEQ 3	ID NO: 45		(-1)				
		<211> LENG'	гн:(7239) <i>Г)</i>	381 m	567				
	3714	<212> TYPE	: DNA	38(M					
	3715	<213> ORGAI	NISM: Artifi	icial seque	nce				
	3717	/ <220> FEAT	JRE:						
	3718	3 <223> OTHE	R INFORMATIO	N: Vector	containing	chimeric ge	ne		
	3720	<400> SEQUI	ENCE: 45		•				
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	3723	cttaggacgg	atcgcttgcc	tgtaacttac	acgcgcctcg	tatctttaa	tgatggaata	120	
	3725	atttgggaat	ttactctgtg	tttatttatt	tttatgtttt	gtatttggat	tttagaaagt	180	
	3727	aaataaagaa	ggtagaagag	ttacggaatg	aagaaaaaa	aataaacaaa	ggtttaaaaa	240	
	3729	atttcaacaa	aaagcgtact	ttacatatat	atttattaga	caagaaaagc	agattaaata	300	
	3731	gatatacatt	cgattaacga	taagtaaaat	gtaaaatcac	aggattttcg	tgtgtggtct	360	
		tctacacaga						420	
		aaaggtagta						480	
		atttttttt						540	
	3739	atttaaatta	taattattt	tatagcacgt	gatgaaaagg	acccaggtgg	cacttttcgg	600	
		ggaaatgtgc							
		ctcatgagac						720	
		attcaacatt						780	
		gctcacccag						840	
		ggttacatcg						900	
		. cgttttccaa						960	
		gacgccgggc						1020	
		tactcaccag						1080	
•		gctgccataa						1140	
		ccgaaggagc						1200	
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	- , 01	-222446699	~						

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\1591632C.raw

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			ggaggcggat				1380
			tgctgataaa				1440
			agatggtaag				1500
			tgaacgaaat				1560
			agaccaagtt				1620
			gatctaggtg				1680
			gttccactga				1740
			tctgcgcgta				1800
			gccggatcaa				1860
			accaaatact				1920
			accgcctaca				1980
			gtcgtgtctt				2040
			ctgaacgggg				2100
			atacctacag				2160
			gtatccggta				2220
			cgcctggtat				2280
			gtgatgctcg				2340
			gttcctggcc				2400
			tgtggataac				2460
			cgagcgcagc				2520
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			aggaaacagc				2760
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			acacttttgt				2940
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			atttttgctg				3060
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			gtggtggttc				3540
			aactaggaaa				3600
			ctaacagagg				3660
			gccaaagtat				3720
			acaattccca				3780
			gtcaaggttc				3840
			ataatcagca				3900
			tggcaagttc				3960
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Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\I591632C.raw

3861 acaaggccaa aactatcagc accaacaaca gggtcagcag cagcaacaag gccactccag 4260 4320 3863 ttcattctca gctttggctt ccatggcaag ttcctacctg ggcaataact ccaattcaaa 3865 ttcgagttat gggggccagc aacaggctaa tgagtatggt agaccacaac acaatggtca 4380 4440 3867 acaacaatct aatqaqtacg gaagaccgca atacggcgga aaccagaact ccaatggaca (1500) 4499 B--> 3869 gcacgaatcc (tttaatttt)ctggcaactt ttctcaacag aacaataacg gcaaccagaa B--> 3871 ccgctacccg cggatggcta gcaaaggaga agaactcttc actggagttg tcccaattct 4560 4620 B--> 3873 tgttgaatta gatggtgatg ttaatgggca caaattttct gtcagtggag agggtgaagg 4680 B--> 3875 tgatgcaaca tacggaaaac ttacccttaa atttatttgc actactggaa aactacctgt 4740 B--> 3877 tccatggcca acacttgtca ctactttcac ttatggtgtt cagtgctttt caagataccc B--> 3879 ggatcatatg aaacggcatg actttttcaa gagtgccatg cccgaaggtt atgtacagga 4800 4860 B--> 3881 aagaactata tttttcaaag atgacgggaa ctacaagaca cgtgctgaag tcaagtttga B--> 3883 aggtgatacc cttgttaata gaatcgagtt aaaaggtatt gattttaaag aagatggaaa 4920 4980 B--> 3885 cattettggg cacaaattgg aatacaacta taactcacac aatgtataca teatggcaga 5040 B--> 3887 caaacaaaag aatggaatca aagctaactt caaaattaga cacaacattg aagatggaag E--> 3889 cgttcaacta gcagaccatt atcaacaaaa tactccaatt ggcgatggcc ctgtcctttt 5100 B--> 3891 accagacaac cattacctgt ccacacaatc tgccctttcg aaagatccca acgaaaagag 5160 5220 E--> 3893 agaccacatg gtccttcttg agtttgtaac agctgctggg attacacatg gcatggatga 8--> 3895 actatacaaa tgagagetee aattegeeet atagtgagte gtattacaat teactggeeg 5280 5340 E--> 3897 tcgttttaca acgtcgtgac tgggaaaacc ctggcgttac ccaacttaat cgccttgcag 5400 E--> 3899 cacateceee tttegecage tggegtaata gegaagagge cegeacegat egecetteee B--> 3901 aacagttgcg cagcctgaat ggcgaatggc gcgacgcgcc ctgtagcggc gcattaagcg 5460 B--> 3903 cggcgggtgt ggtggttacg cgcagcgtga ccgctacact tgccagcgcc ctagcgcccg 5520 5580 E--> 3905 etectttege titetteeet teettteteg ceaegitege eggetiteee egicaagete E--> 3907 taaatcgggg gctcccttta gggttccgat ttagtgcttt acggcacctc gaccccaaaa 5640 5700 E--> 3909 aacttgatta gggtgatggt tcacgtagtg ggccatcgcc ctgatagacg gtttttcgcc 5760 B--> 3911 ctttgacgtt ggagtccacg ttctttaata gtggactctt gttccaaact ggaacaacac E--> 3913 tcaaccctat ctcggtctat tcttttgatt tataagggat tttgccgatt tcggcctatt 5820 B--> 3915 ggttaaaaaa tgagctgatt taacaaaaat ttaacgcgaa ttttaacaaa atattaacgt 5880 E--> 3917 ttacaatttc ctgatgcggt attttctcct tacgcatctg tgcggtattt cacaccgcat 5940 6000 E--> 3919 agggtaataa ctgatataat taaattgaag ctctaatttg tgagtttagt atacatgcat B--> 3921 ttacttataa tacagttttt tagttttgct ggccgcatct tctcaaatat gcttcccagc 6060 E--> 3923 ctgcttttct gtaacgttca ccctctacct tagcatccct tccctttgca aatagtcctc 6120 6180 E--> 3925 ttccaacaat aataatgtca gatcctgtag agaccacatc atccacggtt ctatactgtt E--> 3927 gacccaatgc gtctcccttg tcatctaaac ccacacggg tgtcataatc aaccaatcgt 6240 B--> 3929 aaccttcatc tcttccaccc atgtctcttt gagcaataaa gccgataaca aaatctttgt 6300 6360 E--> 3931 cgctcttcgc aatgtcaaca gtacccttag tatattctcc agtagatagg gagcccttgc 6420 E--> 3933 atgacaatto tgctaacato aaaaggooto taggttoott tgttacttot totgoogoot 6480 E--> 3935 gcttcaaacc gctaacaata cctgggccca ccacaccgtg tgcattcgta atgtctgccc 6540 B--> 3937 attetgetat tetgtataca ecegeagagt aetgeaattt gaetgtatta ecaatgteag 6600 B--> 3939 caaattttct gtcttcgaag agtaaaaaat tgtacttggc ggataatgcc tttagcggct B--> 3941 taactgtgcc ctccatggaa aaatcagtca agatatccac atgtgttttt agtaaacaaa 6660 B--> 3943 ttttgggacc taatgcttca actaactcca gtaattcctt ggtggtacga acatccaatg 6720 B--> 3945 aagcacacaa gtttgtttgc ttttcgtgca tgatattaaa tagcttggca gcaacaggac 6780 B--> 3947 taggatgagt agcagcacgt tccttatatg tagctttcga catgatttat cttcgtttcc 6840 B--> 3949 tgcaggtttt tgttctgtgc agttgggtta agaatactgg gcaatttcat gtttcttcaa 6900 6960 E--> 3951 cactacatat gcgtatatat accaatctaa gtctgtgctc cttccttcgt tcttccttct 7020 B--> 3953 gttcggagat taccgaatca aaaaaatttc aaagaaaccg aaatcaaaaa aaagaataaa 7080 E--> 3955 aaaaaaatga tgaattgaat tgaaaagctg tggtatggtg cactctcagt acaatctgct B--> 3957 ctgatgccgc atagttaagc cagccccgac acccgccaac acccgctgac gcgccctgac 7140

RAW SEQUENCE LISTING

DATE: 02/07/2006

PATENT APPLICATION: US/09/591,632C

TIME: 09:01:23

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\I591632C.raw

B--> 3959 gggcttgtct gctcccggca tccgcttaca gacaagctgt gaccgtctcc gggagctgca

B--> 3961 tgtgtcagag gttttcaccg tcatcaccga aacgcgcga

7239

from Segure 39

225

09/591,6320

gta aca gct gct ggg att aca cat ggc atg gat gaa cta tac aaa tga Val Thr Ala Ala Gly Ile Thr His Gly Met Asp glu Leu Tyr Lys

230 235 720

240) delete, since ho amend acid

VERIFICATION SUMMARY PATENT APPLICATION: US/09/591,632C DATE: 02/07/2006 TIME: 09:01:24

Input Set : A:\34978a.txt

Output Set: N:\CRF4\02072006\I591632C.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:541 M:254 E: No. of Bases conflict, LENGTH:Input:1427 Counted:1426 SEQ:3 L:541 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1427 Found:1426 SEQ:3 L:747 M:252 E: No. of Seq. differs, <211> LENGTH:Input:446 Found:445 SEQ:11 L:3593 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:39 L:3869 M:254 E: No. of Bases conflict, LENGTH:Input:4500 Counted:4499 SEQ:45 M:254 Repeated in SeqNo=45 L:3961 M:252 E: No. of Seq. differs, <211> LENGTH:Input:7239 Found:7238 SEQ:45